

THE ASTROPHYSICAL JOURNAL
CONTENTS OF VOLUME 669, PART 1

2007 NOVEMBER 1, NUMBER 1

	Page
DETECTION OF GRB 060927 AT $z = 5.47$: IMPLICATIONS FOR THE USE OF GAMMA-RAY BURSTS AS PROBES OF THE END OF THE DARK AGES \odot	1
<i>A. E. Ruiz-Velasco, H. Swan, E. Troja, D. Malesani, J. P. U. Fynbo, R. L. C. Starling, D. Xu, F. Aharonian, C. Akerlof, M. I. Andersen, M. C. B. Ashley, S. D. Barthelmy, D. Bersier, J. M. Castro Cerón, A. J. Castro-Tirado, N. Gehrels, E. Göğüş, J. Gorosabel, C. Guidorzi, T. Güver, J. Hjorth, D. Horns, K. Y. Huang, P. Jakobsson, B. L. Jensen, Ü. Kızıloğlu, C. Kouveliotou, H. A. Krimm, C. Ledoux, A. J. Levan, T. Marsh, T. McKay, A. Melandri, B. Milvang-Jensen, C. G. Mundell, P. T. O'Brien, M. Özel, A. Phillips, R. Quimby, G. Rowell, W. Rujopakarn, E. S. Rykoffand, B. E. Schaefer, J. Sollerman, N. R. Tanvir, C. C. Thöne, Y. Urata, W. T. Vestrand, P. M. Vreeswijk, D. Watson, J. C. Wheeler, R. A. M. J. Wijers, J. Wren, S. A. Yost, F. Yuan, M. Zhai, & W. K. Zheng</i>	
INTRINSIC ALIGNMENTS OF GALAXIES AND THEIR EFFECTS ON WEAK-LENSING DETECTIONS OF MASS CONCENTRATIONS	10
<i>Z.-H. Fan</i>	
THE MASSES AND SHAPES OF DARK MATTER HALOS FROM GALAXY-GALAXY LENSING IN THE CFHT LEGACY SURVEY	21
<i>Laura C. Parker, Henk Hoekstra, Michael J. Hudson, Ludovic van Waerbeke, & Yannick Mellier</i>	
BLACK HOLE MASSES AND ENRICHMENT OF $z \sim 6$ SDSS QUASARS \odot	32
<i>Jaron D. Kurk, Fabian Walter, Xiaohui Fan, Linhua Jiang, Dominik A. Riechers, Hans-Walter Rix, Laura Pentericci, Michael A. Strauss, Chris Carilli, & Stefan Wagner</i>	
A THEORETICAL INTERPRETATION OF THE BLACK HOLE FUNDAMENTAL PLANE \odot	45
<i>Philip F. Hopkins, Lars Hernquist, Thomas J. Cox, Brant Robertson, & Elisabeth Krause</i>	
AN OBSERVED FUNDAMENTAL PLANE RELATION FOR SUPERMASSIVE BLACK HOLES \odot	67
<i>Philip F. Hopkins, Lars Hernquist, Thomas J. Cox, Brant Robertson, & Elisabeth Krause</i>	
A SUBSET OF QUASARS IDENTIFIED BY LARGE VALUES OF THEIR DOPPLER REDSHIFT	74
<i>L.-Z. Lü, Y.-P. Qin, & A. C. Gupta</i>	
MASS OUTFLOWS FROM DISSIPATIVE SHOCKS IN HOT ACCRETION FLOWS	85
<i>Keigo Fukumura & Demosthenes Kazanas</i>	
ON THE ORIGIN OF X-RAY EMISSION IN SOME FR I GALAXIES: ADAF OR JET?	96
<i>Qingwen Wu, Feng Yuan, & Xinwu Cao</i>	
CONFIRMATION OF THE 62 DAY X-RAY PERIODICITY FROM M82	106
<i>Philip Kaaret & Hua Feng</i>	
THE AGN NATURE OF 11 OUT OF 12 <i>SWIFT</i> / <i>RXTE</i> UNIDENTIFIED SOURCES THROUGH OPTICAL AND X-RAY SPECTROSCOPY \odot	109
<i>R. Landi, N. Masetti, L. Morelli, E. Palazzi, L. Bassani, A. Malizia, A. Bazzano, A. J. Bird, A. J. Dean, G. Galaz, D. Minniti, & P. Ubertini</i>	
THE CASE FOR OPTICALLY THICK HIGH-VELOCITY BROAD-LINE REGION GAS IN ACTIVE GALACTIC NUCLEI	126
<i>Stephanie A. Snedden & C. Martin Gaskell</i>	
THE KINEMATIC EVOLUTION OF STRONG Mg II ABSORBERS \odot	135
<i>Andrew C. Mshar, Jane C. Charlton, Ryan S. Lynch, Chris Churchill, & Tae-Sun Kim</i>	
PROBING THE DARK MATTER AND GAS FRACTION IN RELAXED GALAXY GROUPS WITH X-RAY OBSERVATIONS FROM <i>CHANDRA</i> AND <i>XMM-NEWTON</i> \odot	158
<i>Fabio Gastaldello, David A. Buote, Philip J. Humphrey, Luca Zappacosta, James S. Bullock, Fabrizio Brighenti, & William G. Mathews</i>	
THE GEMINI DEEP DEEP SURVEY. VIII. WHEN DID EARLY-TYPE GALAXIES FORM?	184
<i>Roberto G. Abraham, Preeti Nair, Patrick J. McCarthy, Karl Glazebrook, Erin Mentuch, Haojing Yan, Sandra Savaglio, David Crampton, Richard Murowinski, Stephanie Juneau, Damien Le Borgne, R. G. Carlberg, Inger Jorgensen, Kathy Roth, Hsiao-Wen Chen, & Ronald O. Marzke</i>	
ON THE ORBIT STRUCTURE OF THE LOGARITHMIC POTENTIAL	202
<i>C. Belmonte, D. Boccaletti, & G. Pucacco</i>	

	Page
UNSTABLE DISK GALAXIES. I. MODAL PROPERTIES <i>Mir Abbas Jalali</i>	218
GRAVITATIONAL STABILITY OF CIRCUMNUCLEAR DISKS IN ELLIPTICAL GALAXIES <i>Daisuke Kawata, Renyue Cen, & Luis C. Ho</i>	232
STELLAR POPULATIONS OF LUMINOUS EVOLVED GALAXIES AT $z \sim 1.5$ <i>Elizabeth J. McGrath, Alan Stockton, & Gabriela Canalizo</i>	241
SPECTROPHOTOMETRIC INVESTIGATIONS OF BLUE COMPACT DWARF GALAXIES: MARKARIAN 35 <i>Luz M. Cairós, Nicola Caon, Begoña García-Lorenzo, Ana Monreal-Ibero, Ricardo Amorín, Peter Weilbacher, & Polychronis Papaderos</i>	251
MID-INFRARED DIAGNOSTICS OF STARBURST GALAXIES: CLUMPY, DENSE STRUCTURES IN STAR-FORMING REGIONS IN THE ANTENNAE (NGC 4038/4039) © <i>Leonie Snijders, Lisa J. Kewley, & Paul P. van der Werf</i>	269
THE RELATIONSHIP BETWEEN MOLECULAR GAS TRACERS AND KENNICUTT-SCHMIDT LAWS <i>Mark R. Krumholz & Todd A. Thompson</i>	289
THE OXYGEN ABUNDANCE OF NEARBY GALAXIES FROM SLOAN DIGITAL SKY SURVEY SPECTRA <i>Leonid S. Pilyugin & Trinh X. Thuan</i>	299
BAR IMPRINTS ON THE INNER GAS KINEMATICS OF M33 © <i>Edvige Corbelli & René A. M. Walterbos</i>	315
THE SPITZER SURVEY OF THE SMALL MAGELLANIC CLOUD: DISCOVERY OF EMBEDDED PROTOSTARS IN THE H II REGION NGC 346 <i>Joshua D. Simon, Alberto D. Bolatto, Barbara A. Whitney, Thomas P. Robitaille, Ronak Y. Shah, David Makovoz, Snežana Stanimirović, Rodolfo H. Barbá, & Mónica Rubio</i>	327
THE DISCOVERY OF TWO EXTREMELY LOW LUMINOSITY MILKY WAY GLOBULAR CLUSTERS <i>S. Koposov, J. T. A. de Jong, V. Belokurov, H.-W. Rix, D. B. Zucker, N. W. Evans, G. Gilmore, M. J. Irwin, & E. F. Bell</i>	337
SPITZER IRAC OBSERVATIONS OF NEWLY DISCOVERED PLANETARY NEBULAE FROM THE MACQUARIE-AAO-STRASBOURG H α PLANETARY NEBULA PROJECT <i>Martin Cohen, Quentin A. Parker, Anne J. Green, Tara Murphy, Brent Miszalski, David J. Frew, Marilyn R. Meade, Brian Babler, Rémy Indebetouw, Barbara A. Whitney, Christer Watson, Edward B. Churchwell, & Douglas F. Watson</i>	343
SMALL STRUCTURES VIA THERMAL INSTABILITY OF PARTIALLY IONIZED PLASMA. I. CONDENSATION MODE <i>Tsubasa Fukue & Hideyuki Kamaya</i>	363
NEW INSIGHTS ON INTERSTELLAR GAS-PHASE IRON <i>Adam G. Jensen & Theodore P. Snow</i>	378
THE VARIATION OF MAGNESIUM DEPLETION WITH LINE-OF-SIGHT CONDITIONS <i>Adam G. Jensen & Theodore P. Snow</i>	401
WATER VAPOR EMISSION FROM IRC +10216 AND OTHER CARBON-RICH STARS: MODEL PREDICTIONS AND PROSPECTS FOR MULTITRANSITION OBSERVATIONS <i>Eduardo González-Alfonso, David A. Neufeld, & Gary J. Melnick</i>	412
THE SPATIO-KINEMATICAL STRUCTURE AND DISTANCE OF THE PREPLANETARY NEBULA IRAS 19134+2131 <i>Hiroshi Imai, Raghuendra Sahai, & Mark Morris</i>	424
THE ARECIBO METHANOL MASER GALACTIC PLANE SURVEY. II. STATISTICAL AND MULTIWAVELENGTH COUNTERPART ANALYSIS © <i>Jagadheep D. Pandian & Paul F. Goldsmith</i>	435
CORRELATION BETWEEN INFRARED COLORS AND INTENSITY RATIOS OF SiO MASER LINES © <i>Jun-ichi Nakashima & Shuji Deguchi</i>	446
CONTINUUM OBSERVATIONS AT 3 AND 12 mm OF THE HIGH-MASS PROTOSTELLAR JET IRAS 16547-4247 <i>Kate J. Brooks, Guido Garay, Maxim Voronkov, & Luis F. Rodríguez</i>	459
MOLECULAR OUTFLOWS AND A MID-INFRARED CENSUS OF THE MASSIVE STAR FORMATION REGION ASSOCIATED WITH IRAS 18507+0121 <i>D. S. Shepherd, M. S. Povich, B. A. Whitney, T. P. Robitaille, D. E. A. Nürnbergger, L. Bronfman, D. P. Stark, R. Indebetouw, M. R. Meade, & B. L. Babler</i>	464
THE HOT INNER DISK OF FU ORIONIS <i>Zhaohuan Zhu, Lee Hartmann, Nuria Calvet, Jesus Hernandez, James Muzerolle, & Ajay-Kumar Tannirkulam</i>	483
A COMBINED SPITZER AND CHANDRA SURVEY OF YOUNG STELLAR OBJECTS IN THE SERPENS CLOUD CORE © <i>E. Winston, S. T. Megeath, S. J. Wolk, J. Muzerolle, R. Gutermuth, J. L. Hora, L. E. Allen, B. Spitzbart, P. Myers, & G. G. Fazio</i>	493
SEARCH FOR SUPERNOVA NEUTRINO BURSTS AT SUPER-KAMIOKANDE <i>M. Ikeda, A. Takeda, Y. Fukuda, M. R. Vagins, K. Abe, T. Iida, K. Ishihara, J. Kameda, Y. Koshio, A. Minamino, C. Mitsuda, M. Miura, S. Moriyama, M. Nakahata, Y. Obayashi, H. Ogawa, H. Sekiya, M. Shiozawa, Y. Suzuki, Y. Takeuchi, K. Ueshima, H. Watanabe, S. Yamada, I. Higuchi, C. Ishihara, M. Ishitsuka, T. Kajita, K. Kaneyuki, G. Mitsuka, S. Nakayama, H. Nishino, K. Okumura, C. Saji, Y. Takenaga, S. Clark, S. Desai, F. Dufour, E. Kearns, S. Likhoded, M. Litos, J. L. Raaf, J. L. Stone, L. R. Sulak, W. Wang, M. Goldhaber, D. Casper, J. P. Cravens, J. Dunmore, W. R. Kropp, D. W. Liu, S. Mine, C. Regis, M. B. Smy, H. W. Sobel, K. S. Ganezer, J. Hill, W. E. Keig, J. S. Jang, J. Y. Kim, I. T. Lim, K. Scholberg, N. Tanimoto, C. W. Walter, R. Wendell, R. W. Ellsworth, S. Tasaka, G. Guillian, J. G. Learned, S. Matsuno, M. D. Messier, Y. Hayato,</i>	519

	Page
<i>A. K. Ichikawa, T. Ishida, T. Ishii, T. Iwashita, T. Kobayashi, T. Nakadaira, K. Nakamura, K. Nitta, Y. Oyama, Y. Totsuka, A. T. Suzuki, M. Hasegawa, K. Hiraide, H. Maesaka, T. Nakaya, K. Nishikawa, T. Sasaki, S. Yamamoto, M. Yokoyama, T. J. Haines, S. Dazeley, S. Hatakeyama, R. Svoboda, G. W. Sullivan, D. Turcan, A. Habig, T. Sato, Y. Ito, T. Koike, T. Tanaka, C. K. Jung, T. Kato, K. Kobayashi, M. Malek, C. McGrew, A. Sarraj, R. Terri, C. Yamagisawa, N. Tamura, Y. Idehara, M. Sakuda, M. Sugihara, Y. Kuno, M. Yoshida, S. B. Kim, B. S. Yang, J. Yoo, T. Ishizuka, H. Okazawa, Y. Choi, H. K. Seo, Y. Gando, T. Hasegawa, K. Inoue, Y. Furuse, H. Ishii, K. Nishijima, H. Ishino, Y. Watanabe, M. Koshiha, S. Chen, Z. Deng, Y. Liu, D. Kielczewska, J. Zalipska, H. Berns, R. Gran, K. K. Shiraishi, A. Stachyra, E. Thrane, K. Washburn, & R. J. Wilkes (THE SUPER-KAMIOKANDE COLLABORATION)</i>	
AN EXTREMELY BRIGHT ECHO ASSOCIATED WITH SN 2002hh <i>D. L. Welch, Geoffrey C. Clayton, Amy Campbell, M. J. Barlow, Ben E. K. Sogerman, Margaret Meixner, & S. H. R. Bank</i>	525
THE HIGH-ENERGY EMISSION OF GRO J1655–40 AS REVEALED WITH <i>INTEGRAL</i> SPECTROSCOPY OF THE 2005 OUTBURST <i>M. D. Caballero Garcia, J. M. Miller, E. Kuulkers, M. Díaz Trigo, J. Homan, W. H. G. Lewin, P. Kretschmar, A. Domingo, J. M. Mas-Hesse, R. Wijnands, A. C. Fabian, R. P. Fender, & M. van der Klis</i>	534
MAGNETAR-DRIVEN MAGNETIC TOWER AS A MODEL FOR GAMMA-RAY BURSTS AND ASYMMETRIC SUPERNOVAE <i>Dmitri A. Uzdensky & Andrew I. MacFadyen</i>	546
THE VARIABLE RADIO–TO–X-RAY SPECTRUM OF THE MAGNETAR XTE J1810–197 <i>F. Camilo, S. M. Ransom, J. Peñalver, A. Karastergiou, M. H. van Kerkwijk, M. Durant, J. P. Halpern, J. Reynolds, C. Thum, D. J. Helfand, N. Zimmerman, & I. Cognard</i>	561
PHASE-RESOLVED SPECTROSCOPY OF THE VELA PULSAR WITH <i>XMM-NEWTON</i> © <i>A. Manzali, A. De Luca, & P. A. Caraveo</i>	570
X-RAY OBSERVATIONS AND INFRARED IDENTIFICATION OF THE TRANSIENT 7.8 s X-RAY BINARY PULSAR XTE J1829–098 <i>J. P. Halpern & E. V. Gotthelf</i>	579
MAGNETICALLY DRIVEN EXPLOSIONS OF RAPIDLY ROTATING WHITE DWARFS FOLLOWING ACCRETION-INDUCED COLLAPSE © <i>L. Dessart, A. Burrows, E. Livne, & C. D. Ott</i>	585
NEON ABUNDANCES FROM A <i>SPITZER</i> /IRS SURVEY OF WOLF-RAYET STARS <i>R. Ignace, J. P. Cassinelli, G. Tracy, E. Churchwell, & H. J. G. L. M. Lamers</i>	600
A DECREASED PROBABILITY OF HABITABLE PLANET FORMATION AROUND LOW-MASS STARS <i>Sean N. Raymond, John Scalo, & Victoria S. Meadows</i>	606
A NEW PHENOMENON IN IMPULSIVE-FLARE-ASSOCIATED ENERGETIC PARTICLES © <i>E. E. Chollet, J. Giacalone, J. E. Mazur, & M. Al Dayeh</i>	615
A QUANTITATIVE, TOPOLOGICAL MODEL OF RECONNECTION AND FLUX ROPE FORMATION IN A TWO-RIBBON FLARE © <i>D. W. Longcope & C. Beveridge</i>	621
LATITUDE DISTRIBUTION OF POLAR MAGNETIC FLUX IN THE CHROMOSPHERE NEAR SOLAR MINIMUM <i>N.-E. Raouafi, J. W. Harvey, & C. J. Henney</i>	636
SPECKLE NOISE AND DYNAMIC RANGE IN CORONAGRAPHIC IMAGES © <i>Rémi Soummer, André Ferrari, Claude Aime, & Laurent Jolissaint</i>	642
ERRATUM: “THE LARGE- AND SMALL-SCALE STRUCTURES OF DUST IN THE STAR-FORMING PERSEUS MOLECULAR CLOUD” (<i>ApJ</i> , 646, 1009 [2006]) <i>Helen Kirk, Doug Johnstone, & James Di Francesco</i>	657
ERRATUM: “MASSIVE PERTURBER–DRIVEN INTERACTIONS BETWEEN STARS AND A MASSIVE BLACK HOLE” (<i>ApJ</i> , 656, 709 [2007]) <i>Hagai B. Perets, Clovis Hopman, & Tal Alexander</i>	661

2007 NOVEMBER 10, NUMBER 2

EFFICIENT SIMULATIONS OF EARLY STRUCTURE FORMATION AND REIONIZATION © <i>Andrei Mesinger & Steven Furlanetto</i>	663
REDEFINING THE MISSING SATELLITES PROBLEM © <i>Louis E. Strigari, James S. Bullock, Manoj Kaplinghat, Juery Diemand, Michael Kuhlen, & Piero Madau</i>	676
DIFFUSION OF COSMIC RAYS IN THE EXPANDING UNIVERSE. II. ENERGY SPECTRA OF ULTRA-HIGH ENERGY COSMIC RAYS © <i>V. Berezhinsky & A. Z. Gazizov</i>	684

	Page
THE NEIGHBORHOOD FUNCTION AND ITS APPLICATION TO IDENTIFYING LARGE-SCALE STRUCTURE IN THE COMOVING UNIVERSE FRAME ©	692
<i>Y.-P. Qin, L.-Z. Lü, F.-W. Zhang, B.-B. Zhang, & J. Zhang</i>	
A SUBARU WEAK-LENSING SURVEY. I. CLUSTER CANDIDATES AND SPECTROSCOPIC VERIFICATION ©	714
<i>Satoshi Miyazaki, Takashi Hamana, Richard S. Ellis, Nobunari Kashikawa, Richard J. Massey, James Taylor, & Alexandre Refregier</i>	
COSMOLOGICAL SHOCK WAVES IN THE LARGE-SCALE STRUCTURE OF THE UNIVERSE: NONGRAVITATIONAL EFFECTS	729
<i>Hyesung Kang, Dongsu Ryu, Renyue Cen, & J. P. Ostriker</i>	
INTERVENING METAL SYSTEMS IN GRB AND QSO SIGHT LINES: THE Mg II AND C IV QUESTION ©	741
<i>Vladimir Sudilovsky, Sandra Savaglio, Paul Vreeswijk, Cédric Ledoux, Alain Smette, & Jochen Greiner</i>	
MASSIVE LYMAN BREAK GALAXIES AT $z \sim 3$ IN THE SPITZER EXTRAGALACTIC FIRST LOOK SURVEY ©	749
<i>Hyunjin Shim, Myungshin Im, Phillip Choi, Lin Yan, & Lisa Storrie-Lombardi</i>	
CHANDRA X-RAY SOURCES IN THE LALA CETUS FIELD ©	765
<i>J. X. Wang, Z. Y. Zheng, S. Malhotra, S. L. Finkelstein, J. E. Rhoads, C. A. Norman, & T. M. Heckman</i>	
THE ORIGIN OF LINE EMISSION IN MASSIVE $z \sim 2.3$ GALAXIES: EVIDENCE FOR COSMIC DOWNSIZING OF AGN HOST GALAXIES	776
<i>Mariska Kriek, Pieter G. van Dokkum, Marijn Franx, Garth D. Illingworth, Paolo Coppi, Natascha M. Förster Schreiber, Eric Gawiser, Ivo Labbé, Paulina Lira, Danilo Marchesini, Ryan Quadri, Gregory Rudnick, Edward N. Taylor, C. Megan Urry, & Paul P. van der Werf</i>	
THE EFFECT OF VARIABILITY ON THE ESTIMATION OF QUASAR BLACK HOLE MASSES ©	791
<i>Brian C. Wilhite, Robert J. Brunner, Donald P. Schneider, & Daniel E. Vanden Berk</i>	
SPECTACULAR SHELLS IN THE HOST GALAXY OF THE QSO MC2 1635+119	801
<i>Gabriela Canalizo, Nicola Bennert, Bruno Jungwiert, Alan Stockton, François Schweizer, Mark Lacy, & Chien Peng</i>	
PAH EMISSION FROM ULTRALUMINOUS INFRARED GALAXIES	810
<i>V. Desai, L. Armus, H. W. W. Spoon, V. Charmandaris, J. Bernard-Salas, B. R. Brandl, D. Farrah, B. T. Soifer, H. I. Teplitz, P. M. Ogle, D. Devost, S. J. U. Higdon, J. A. Marshall, & J. R. Houck</i>	
THE CO TULLY-FISHER RELATION AND IMPLICATIONS FOR THE HOST GALAXIES OF HIGH-REDSHIFT QUASARS ©	821
<i>Luis C. Ho</i>	
HIGH-RESOLUTION X-RAY SPECTROSCOPY OF A LOW-LUMINOSITY ACTIVE GALACTIC NUCLEUS: THE STRUCTURE AND DYNAMICS OF M81* ©	830
<i>A. J. Young, M. A. Nowak, S. Markoff, H. L. Marshall, & C. R. Canizares</i>	
AROMATIC FEATURES IN AGNs: STAR-FORMING INFRARED LUMINOSITY FUNCTION OF AGN HOST GALAXIES ©	841
<i>Yong Shi, Patrick Ogle, George H. Rieke, Robert Antonucci, Dean C. Hines, Paul S. Smith, Frank J. Low, Jeroen Bouwman, & Christopher Willmer</i>	
VARIABLE VERY HIGH ENERGY γ -RAY EMISSION FROM MARKARIAN 501 ©	862
<i>J. Albert, E. Aliu, H. Anderhub, P. Antoran, A. Armada, C. Baixeras, J. A. Barrio, H. Bartko, D. Bastieri, J. K. Becker, W. Bednarek, K. Berger, C. Bigongiari, A. Biland, R. K. Bock, P. Bordas, V. Bosch-Ramon, T. Bretz, I. Britvich, M. Camara, E. Carmona, A. Chilingarian, J. A. Coarasa, S. Commichau, J. L. Contreras, J. Cortina, M. T. Costado, V. Curtef, V. Danielyan, F. Dazzi, A. De Angelis, C. Delgado, R. de los Reyes, B. De Lotto, E. Domingo-Santamaría, D. Dorner, M. Doro, M. Errando, M. Fagioli, D. Ferenc, E. Fernández, R. Firpo, J. Flix, M. V. Fonseca, L. Font, M. Fuchs, N. Galante, R. J. García-López, M. Garzarczyk, M. Gaug, M. Giller, F. Goebel, D. Hakobyan, M. Hayashida, T. Hengstebeck, A. Herrero, D. Höhne, J. Hose, D. Hrupec, C. C. Hsu, P. Jacot, T. Jogler, R. Kosyra, D. Kranich, R. Krieger, A. Laille, E. Lindfors, S. Lombardi, F. Longo, J. López, M. López, E. Lorenz, P. Majumdar, G. Maneva, K. Mannheim, O. Mansutti, M. Marioni, M. Martínez, D. Mazin, C. Merck, M. Meucci, M. Meyer, J. M. Miranda, R. Mirzoyan, S. Mizobuchi, A. Moralejo, D. Nieto, K. Nilsson, J. Ninkovic, E. Oña-Wilhelmi, N. Otte, I. Oya, D. Paneque, M. Panniello, R. Paoletti, J. M. Paredes, M. Pasanen, D. Pascoli, F. Pauss, R. Pegna, M. Persic, L. Peruzzo, A. Piccioli, E. Prandini, N. Puchades, A. Raymers, W. Rhode, M. Ribó, J. Rico, M. Rissi, A. Robert, S. Rüger, A. Saggion, T. Saito, A. Sánchez, P. Sartori, V. Scalzotto, V. Scapin, R. Schmitt, T. Schweizer, M. Shayduk, K. Shinozaki, S. N. Shore, N. Sidro, A. Sillanpää, D. Sobczynska, A. Stamer, L. S. Stark, L. Takalo, F. Tavecchio, P. Temnikov, D. Tescaro, M. Teshima, D. F. Torres, N. Turini, H. Vankov, V. Vitale, R. M. Wagner, T. Wibig, W. Wittek, F. Zandanel, R. Zanin, & J. Zapatero</i>	
SWIFT OBSERVATIONS OF HIGH-REDSHIFT RADIO-LOUD QUASARS ©	884
<i>R. M. Sambruna, F. Tavecchio, G. Ghisellini, D. Donato, S. T. Holland, C. B. Markwardt, J. Tueller, & R. F. Mushotzky</i>	
A CHANDRA STUDY OF PARTICLE ACCELERATION IN THE MULTIPLE HOT SPOTS OF NEARBY RADIO GALAXIES	893
<i>M. J. Hardcastle, J. H. Croston, & R. P. Kraft</i>	
THE MEAN AND SCATTER OF THE VELOCITY DISPERSION–OPTICAL RICHNESS RELATION FOR maxBCG GALAXY CLUSTERS	905
<i>M. R. Becker, T. A. McKay, B. Koester, R. H. Wechsler, E. Rozo, A. Evrad, D. Johnston, E. Sheldon, J. Annis, E. Lau, R. Nichol, & C. Miller</i>	
INTEGRAL FIELD SPECTROSCOPY OF HIGH-REDSHIFT STAR-FORMING GALAXIES WITH LASER-GUIDED ADAPTIVE OPTICS: EVIDENCE FOR DISPERSION-DOMINATED KINEMATICS	929
<i>David R. Law, Charles C. Steidel, Dawn K. Erb, James E. Larkin, Max Pettini, Alice E. Shapley, & Shelley A. Wright</i>	
THE AGES, METALLICITIES, AND STAR FORMATION HISTORIES OF EARLY-TYPE GALAXIES IN THE SDSS	947
<i>Raul Jimenez, Mariangela Bernardi, Zoltan Haiman, Ben Panter, & Alan F. Heavens</i>	

	Page
THE PRESSURE-CONFINED WIND OF THE MASSIVE AND COMPACT SUPER STAR CLUSTER M82-A1 <i>Sergiy Silich, Guillermo Tenorio-Tagle, & Casiana Muñoz-Tuñón</i>	952
WARM MOLECULAR HYDROGEN IN THE SPITZER SINGS GALAXY SAMPLE © <i>H. Roussel, G. Helou, D. J. Hollenbach, B. T. Draine, J. D. Smith, L. Armus, E. Schinnerer, F. Walter, C. W. Engelbracht, M. D. Thornley, R. C. Kennicutt, D. Calzetti, D. A. Dale, E. J. Murphy, & C. Bot</i>	959
ON THE METALLICITY-COLOR RELATIONS AND BIMODAL COLOR DISTRIBUTIONS IN EXTRAGALACTIC GLOBULAR CLUSTER SYSTEMS <i>Michele Cantiello & John P. Blakeslee</i>	982
X-RAY ABSORPTION FROM THE MILKY WAY HALO AND THE LOCAL GROUP <i>Joel N. Bregman & Edward J. Lloyd-Davies</i>	990
IRAC OBSERVATIONS OF CO $J = 4 \rightarrow 3$ HIGH-VELOCITY CLOUD IN THE 30 DORADUS COMPLEX IN THE LARGE MAGELLANIC CLOUD © <i>Hak-Sub Kim, Sungeun Kim, Jih-Yong Bak, Mario Garcia, Bernard Brandl, Kecheng Xiao, Wilfred Walsh, R. Chris Smith, & Soyoung Youn</i>	1003
CHEMICAL ABUNDANCES OF LUMINOUS COOL STARS IN THE GALACTIC CENTER FROM HIGH-RESOLUTION INFRARED SPECTROSCOPY <i>Katia Cunha, Kris Sellgren, Verne V. Smith, Solange V. Ramirez, Robert D. Blum, & Donald M. Terndrup</i>	1011
EVIDENCE FOR A LONG-STANDING TOP-HEAVY INITIAL MASS FUNCTION IN THE CENTRAL PARSEC OF THE GALAXY <i>H. Maness, F. Martins, S. Trippe, R. Genzel, J. R. Graham, C. Sheehy, M. Salaris, S. Gillessen, T. Alexander, T. Paumard, T. Ott, R. Abuter, & F. Eisenhauer</i>	1024
FORMATION AND COLLAPSE OF QUIESCENT CLOUD CORES INDUCED BY DYNAMIC COMPRESSIONS © <i>Gilberto C. Gómez, Enrique Vázquez-Semadeni, Mohsen Shadmehri, & Javier Ballesteros-Paredes</i>	1042
AN H ₂ CO 6 cm MASER PINPOINTING A POSSIBLE CIRCUMSTELLAR TORUS IN IRAS 18566+0408 <i>E. Araya, P. Hofner, M. Sewilo, W. M. Goss, H. Linz, S. Kurtz, L. Olmi, E. Churchwell, L. F. Rodriguez, & G. Garay</i>	1050
OVRO N ₂ H ⁺ OBSERVATIONS OF CLASS 0 PROTOSTARS: CONSTRAINTS ON THE FORMATION OF BINARY STARS © <i>Xuepeng Chen, Ralf Launhardt, & Thomas Henning</i>	1058
NEAR-INFRARED INTERFEROMETRIC, SPECTROSCOPIC, AND PHOTOMETRIC MONITORING OF T TAURI INNER DISKS <i>J. A. Eisner, L. A. Hillenbrand, R. J. White, J. S. Bloom, R. L. Akeson, & C. H. Blake</i>	1072
GRAIN ALIGNMENT AND POLARIZED EMISSION FROM MAGNETIZED T TAURI DISKS <i>Jungyeon Cho & A. Lazarian</i>	1085
GRB 051022: PHYSICAL PARAMETERS AND EXTINCTION OF A PROTOTYPE DARK BURST <i>Evert Rol, Alexander van der Horst, Klaas Wiersema, Sandeep K. Patel, Andrew Levan, Melissa Nysewander, Chryssa Kouveliotou, Ralph A. M. J. Wijers, Nial Tanvir, Dan Reichart, Andrew S. Fruchter, John Graham, Jan-Erik Orvaldsen, Andreas O. Jaunsen, Peter Jonker, Wilbert van Ham, Jens Hjorth, Rhaana L. C. Starling, Paul T. O'Brien, Johan Fynbo, David N. Burrows, & Richard Strom</i>	1098
THE DARK SIDE OF ROTSE-III PROMPT GRB OBSERVATIONS © <i>S. A. Yost, F. Aharonian, C. W. Akerlof, M. C. B. Ashley, S. Barthelmy, N. Gehrels, E. Göğüş, T. Güver, D. Horns, Ü. Kızıloğlu, H. A. Krimm, T. A. McKay, M. Özel, A. Phillips, R. M. Quimby, G. Rowell, W. Rujopakarn, E. S. Rykoff, B. E. Schaefer, D. A. Smith, H. F. Swan, W. T. Vestrand, J. C. Wheeler, J. Wren, & F. Yuan</i>	1107
EVIDENCE OF EXPONENTIAL DECAY EMISSION IN THE SWIFT GAMMA-RAY BURSTS © <i>T. Sakamoto, J. E. Hill, R. Yamazaki, L. Angelini, H. A. Krimm, G. Sato, S. Swindell, K. Takami, & J. P. Osborne</i>	1115
MULTIWAVELENGTH MONITORING OF THE UNUSUAL ULTRALUMINOUS SUPERNOVA SN 1978K IN NGC 1313 AND THE SEARCH FOR AN ASSOCIATED GAMMA-RAY BURST © <i>I. A. Smith, S. D. Ryder, M. Böttcher, S. J. Tingay, A. Stacy, M. Pakull, & E. P. Liang</i>	1130
HYSTERESIS OF SPECTRAL EVOLUTION IN THE SOFT STATE OF BLACK HOLE BINARY LMC X-3 <i>D. M. Smith, D. M. Dawson, & J. H. Swank</i>	1138
CONSTRAINTS ON THE STEADY AND PULSED VERY HIGH ENERGY GAMMA-RAY EMISSION FROM OBSERVATIONS OF PSR B1951+32/CTB 89 WITH THE MAGIC TELESCOPE <i>J. Albert, E. Aliu, H. Anderhub, P. Antoranz, A. Armada, C. Baixeras, J. A. Barrio, H. Bartko, D. Bastieri, J. K. Becker, W. Bednarek, K. Berger, C. Bigongiari, A. Biland, R. K. Bock, P. Bordas, V. Bosch-Ramon, T. Bretz, I. Britvitch, M. Camara, E. Carmona, A. Chilingarian, J. A. Coarasa, S. Commichau, J. L. Contreras, J. Cortina, M. T. Costado, V. Curtef, V. Danielyan, F. Dazzi, A. De Angelis, C. Delgado, R. de los Reyes, B. De Lotto, E. Domingo-Santamaria, D. Dorner, M. Doro, M. Errando, M. Fagioli, D. Ferenc, E. Fernández, R. Firpo, J. Flix, M. V. Fonseca, L. Font, M. Fuchs, N. Galante, R. Garcia-López, M. Garzaczuk, M. Gauy, M. Giller, F. Goebel, D. Hakobyan, M. Hayashida, T. Henstebeck, A. Herrero, K. Hirotani, D. Höhle, J. Hose, C.-C. Hsu, P. Jacon, T. Jogler, R. Kosyra, D. Kranich, R. Krüzer, A. Laille, E. Lindfors, S. Lombardi, F. Longo, J. López, M. López, E. Lorenz, P. Majumdar, G. Maneva, K. Mannheim, O. Mansutti, M. Mariotti, M. Martínez, D. Mazin, C. Merck, M. Meucci, M. Meyer, J. M. Miranda, R. Mirzoyan, S. Mizobuchi, A. Moralejo, D. Nieto, K. Nilsson, J. Ninković, E. Oña-Willhelmi, N. Otte, I. Oya, D. Paneque, M. Panniello, R. Paoletti, J. M. Paredes, M. Pasanen, D. Pascoli, F. Pauss, R. Peña, M. Persic, L. Peruzzo, A. Piccioli, M. Poller, E. Prandini, N. Puchades, A. Raymers, W. Rhode, M. Ribó, J. Rico, M. Rissi, A. Robert, S. Rügemer, A. Saggion, A. Sánchez, P. Sartori, V. Scalzotto, V. Scapin, R. Schmitt, T. Schweizer, M. Shayduk, K. Shinzaki, S. N. Shore, N. Sidro, A. Sillanpää, D. Sobczyska, A. Stamerra, L. S. Stark, L. Takalo, P. Temnikov, D. Tesaro, M. Teshima, N. Tonello, D. F. Torres, N. Turini, H. Vankov, V. Vitale, R. M. Wagner, T. Wibig, W. Wittek, F. Zandanel, R. Zanin, & J. Zapatero</i>	1143

	Page
INTERFEROMETRIC OBSERVATIONS OF V1663 AQUILAE (NOVA AQL 2005) <i>B. F. Lane, A. Retter, J. A. Eisner, M. W. Muterspaugh, R. R. Thompson, & J. L. Sokolowski</i>	1150
RAMAN-SCATTERED O VI λ 6825 AND THE ACCRETION DISK EMISSION MODEL IN THE SYMBIOTIC STARS V1016 CYGNI AND HM SAGITTAE <i>Hee-Won Lee & Suna Kang</i>	1156
AGES FOR ILLUSTRATIVE FIELD STARS USING GYROCHRONOLOGY: VIABILITY, LIMITATIONS, AND ERRORS \odot <i>Sydney A. Barnes</i>	1167
SIMULATIONS OF TURBULENT CONVECTION IN ROTATING YOUNG SOLARLIKE STARS: DIFFERENTIAL ROTATION AND MERIDIONAL CIRCULATION <i>Jérôme Ballot, Allan Sacha Brun, & Sylvaine Turck-Chièze</i>	1190
THE ORBITS OF THE QUADRUPLE STAR SYSTEM 88 TAURI A FROM PHASES DIFFERENTIAL ASTROMETRY AND RADIAL VELOCITY <i>Benjamin F. Lane, Matthew W. Muterspaugh, Francis C. Fekel, Michael Williamson, Stanley Browne, Maciej Konacki, Bernard F. Burke, M. M. Colavita, S. R. Kulkarni, & M. Shao</i>	1209
THE METALLICITY OF STARS WITH CLOSE COMPANIONS <i>Daniel Grether & Charles H. Lineweaver</i>	1220
REVISED METALLICITY CLASSES FOR LOW-MASS STARS: DWARFS (dM), SUBDWARFS (sdM), EXTREME SUBDWARFS (esdM), AND ULTRASUBDWARFS (usdM) <i>Sébastien Lépine, R. Michael Rich, & Michael M. Shara</i>	1235
A SYSTEMATIC STUDY OF DEPARTURES FROM CHEMICAL EQUILIBRIUM IN THE ATMOSPHERES OF SUBSTELLAR MASS OBJECTS <i>Ivan Hubeny & Adam Burrows</i>	1248
MOLECULAR LINE RADIATIVE TRANSFER IN PROTOPLANETARY DISKS: MONTE CARLO SIMULATIONS VERSUS APPROXIMATE METHODS <i>Ya. Pavlyuchenkov, D. Semenov, Th. Henning, St. Guilloteau, V. Piétu, R. Launhardt, & A. Dutrey</i>	1262
MASS-RADIUS RELATIONSHIPS FOR SOLID EXOPLANETS \odot <i>S. Seager, M. Kuchner, C. A. Hier-Majumder, & B. Militzer</i>	1279
SHRINKING BINARY AND PLANETARY ORBITS BY KOZAI CYCLES WITH TIDAL FRICTION <i>Daniel Fabrycky & Scott Tremaine</i>	1298
FORMATION OF PROTOPLANETS FROM MASSIVE PLANETESIMALS IN BINARY SYSTEMS <i>Yusuke Tsukamoto & Junichiro Makino</i>	1316
ON CONSTRAINING A TRANSITING EXOPLANET'S ROTATION RATE WITH ITS TRANSIT SPECTRUM \odot <i>David S. Spiegel, Zoltán Haiman, & B. Scott Gaudi</i>	1324
FIVE INTERMEDIATE-PERIOD PLANETS FROM THE N2K SAMPLE <i>Debra A. Fischer, Steven S. Vogt, Geoffrey W. Marcy, R. Paul Butler, Bun'ei Sato, Gregory W. Henry, Sarah Robinson, Gregory Laughlin, Shigeru Ida, Eri Toyota, Masashi Omiya, Peter Driscoll, Genya Takeda, Jason T. Wright, & John A. Johnson</i>	1336
MILLIMAGNITUDE PHOTOMETRY FOR TRANSITING EXTRASOLAR PLANETARY CANDIDATES. IV. SOLUTION TO THE PUZZLE OF THE EXTREMELY RED OGLE-TR-82 PRIMARY \odot <i>Sergio Hoyer, Sebastián Ramírez Alegría, Valentin D. Ivanov, Dante Minniti, Grzegorz Pietrzyński, María Teresa Ruiz, Wolfgang Gieren, Andrzej Udalski, Manuela Zoccali, Eleazar Rodrigo Carrasco, Rodrigo F. Díaz, José Miguel Fernández, José Gallardo, Marina Rejkuba, & Felipe Pérez</i>	1345
A PLANETARY-MASS COMPANION TO THE K0 GIANT HD 17092 <i>A. Niedzielski, M. Konacki, A. Wolszczan, G. Nowak, G. Maciejewski, C. R. Gelino, M. Shao, M. Shetrone, & L. W. Ramsey</i>	1354
NEW EVIDENCE FOR THE ROLE OF EMERGING FLUX IN A SOLAR FILAMENT'S SLOW RISE PRECEDING ITS CME-PRODUCING FAST ERUPTION \odot <i>Alphonse C. Sterling, Louise K. Harra, & Ronald L. Moore</i>	1359
THE ERUPTION FROM A SIGMOIDAL SOLAR ACTIVE REGION ON 2005 MAY 13 <i>Chang Liu, Jeongwoo Lee, Vasyl Yurchyshyn, Na Deng, Kyung-suk Cho, Marian Karlický, & Haimin Wang</i>	1372
CALIBRATION OF SEISMIC SIGNATURES OF ACTIVE REGIONS ON THE FAR SIDE OF THE SUN <i>I. González Hernández, F. Hill, & C. Lindsey</i>	1382
MHD SIMULATIONS OF PENUMBRA FINE STRUCTURE \odot <i>T. Heinemann, A. Nordlund, G. B. Scharmer, & H. C. Spruit</i>	1390
HELIOSEISMIC HOLOGRAPHY OF SIMULATED SOLAR CONVECTION AND PROSPECTS FOR THE DETECTION OF SMALL-SCALE SUBSURFACE FLOWS <i>D. C. Braun, A. C. Birch, D. Benson, R. F. Stein, & A. Nordlund</i>	1395
WHAT CAN THE COSMIC MICROWAVE BACKGROUND TELL US ABOUT THE OUTER SOLAR SYSTEM? \odot <i>Daniel Babich, Cullen H. Blake, & Charles L. Steinhardt</i>	1406
TEMPERATURE-DEPENDENT FORMATION OF OZONE IN SOLID OXYGEN BY 5 keV ELECTRON IRRADIATION AND IMPLICATIONS FOR SOLAR SYSTEM ICES \odot <i>Bhalamurugan Sivaraman, Corey S. Jamieson, Nigel J. Mason, & Ralf I. Kaiser</i>	1414

THE ASTROPHYSICAL JOURNAL LETTERS

CONTENTS OF VOLUME 669, PART 2

2007 NOVEMBER 1, NUMBER 1

	Page
IGR J22517+2218=MG3 J225155+2217: A NEW GAMMA-RAY LIGHTHOUSE IN THE DISTANT UNIVERSE (E) <i>L. Bassani, R. Landi, A. Malizia, M. T. Fionchi, A. Bazzano, A. J. Bird, A. J. Dean, N. Gehrels, P. Giommi, and P. Ubertini</i>	L1
THE SINFONI MG II PROGRAM FOR LINE EMITTERS (SIMPLE): DISCOVERING STARBURSTS NEAR QSO SIGHT LINES (E) <i>Nicolas Bouché, Michael T. Murphy, Céline Péroux, Richard Davies, Frank Eisenhauer, Natascha M. Förster Schreiber, and Linda Tacconi</i>	L5
A DENSE GAS TRIGGER FOR OH MEGAMASERS <i>Jeremy Darling</i>	L9
KNOT IN CENTAURUS A: A STOCHASTIC MAGNETIC FIELD FOR DIFFUSIVE SYNCHROTRON RADIATION? <i>Jirong Mao and Jiancheng Wang</i>	L13
THE LUMINOUS AND CARBON-RICH SUPERNOVA 2006gz: A DOUBLE DEGENERATE MERGER? <i>M. Hicken, P. M. Garnavich, J. L. Prieto, S. Blondin, D. L. DePoy, R. P. Kirshner, and J. Parrent</i>	L17
THE ORBITAL PERIOD OF THE WOLF-RAYET BINARY IC 10 X-1: DYNAMIC EVIDENCE THAT THE COMPACT OBJECT IS A BLACK HOLE (E) <i>A. H. Prestwich, R. Kilgard, P. A. Crowther, S. Carpano, A. M. T. Pollock, A. Zezas, S. H. Saar, T. P. Roberts, and M. J. Ward</i>	L21
THE UNUSUAL VARIABILITY OF THE LARGE MAGELLANIC CLOUD PLANETARY NEBULA RPJ 053059-683542 (E) <i>Richard A. Shaw, Armin Rest, Guillermo Damke, R. Chris Smith, Warren A. Reid, and Quentin A. Parker</i>	L25
DISCOVERY OF 442 Hz PULSATIONS FROM AN X-RAY SOURCE IN THE GLOBULAR CLUSTER NGC 6440 <i>Fotis P. Gavril, Tod E. Strohmayer, Jean H. Swank, and Craig B. Markwardt</i>	L29
DISCOVERY OF GAS ACCRETION ONTO STARS IN 13 MYR OLD η AND χ PERSEI (E) <i>Thayne Currie, Scott J. Kenyon, Zoltan Balog, Ann Bragg, and Susan Tokarz</i>	L33
SIGNATURES OF INFLOW MOTION IN CORES OF MASSIVE STAR FORMATION: POTENTIAL COLLAPSE CANDIDATES <i>Yuefang Wu, Christian Henkel, Rui Xue, Xin Guan, and Martin Miller</i>	L37
A DIRECT DISTANCE AND LUMINOSITY DETERMINATION FOR A SELF-LUMINOUS GIANT EXOPLANET: THE TRIGONOMETRIC PARALLAX TO 2MASSW J1207334-393254ab (E) <i>B. A. Biller and L. M. Close</i>	L41
THE TRIGONOMETRIC PARALLAX OF THE BROWN DWARF PLANETARY SYSTEM 2MASSW J1207334-393254 (E) <i>John E. Gizis, Wei-Chun Jao, John P. Subasavage, and Todd J. Henry</i>	L45
SOLAR FLARE HARD X-RAY EMISSION FROM THE HIGH CORONA <i>Sam Krucker, S. M. White, and R. P. Lin</i>	L49
FREE MAGNETIC ENERGY IN SOLAR ACTIVE REGIONS ABOVE THE MINIMUM-ENERGY RELAXED STATE <i>S. Régnier and E. R. Priest</i>	L53
OBSERVATIONS OF DARK LANES IN UMBRAL FINE STRUCTURE FROM THE HINODE SOLAR OPTICAL TELESCOPE: EVIDENCE FOR MAGNETOCONVECTION <i>Lokesh Bharti, Chandan Joshi, and S. N. A. Jaaffrey</i>	L57
INSTRUCTIONS TO AUTHORS OF LETTERS, AND ADDITIONAL USEFUL INFORMATION	Inside Back Cover
INSTRUCTIONS FOR ELECTRONIC MANUSCRIPT SUBMISSION	Back Cover

2007 NOVEMBER 10, NUMBER 2

	Page
LARGE AMOUNTS OF OPTICALLY OBSCURED STAR FORMATION IN THE HOST GALAXIES OF SOME TYPE 2 QUASARS <i>M. Lacy, A. Sajina, A. O. Petric, N. Seymour, G. Canalizo, S. E. Ridgway, L. Armus, and L. J. Storrie-Lombardi</i>	L61
A MODEL FOR FAST RISING, SLOWLY DECAYING SUBPULSES IN γ -RAY BURSTS (E) <i>David Eichler and Hadar Manis</i>	L65

[O III] $\lambda 5007$ EMISSION FROM THE BLACK HOLE X-RAY BINARY IN AN NGC 4472 GLOBULAR CLUSTER <i>Stephen E. Zepf, Thomas J. Maccarone, Gilles Bergond, Arunav Kundu, Katherine L. Rhode, and John J. Salzer</i>	L69
THE DETECTION OF MOLECULAR GAS IN THE OUTSKIRTS OF NGC 6946 <i>Jonathan Braine, Annette M. N. Ferguson, Frank Bertoldi, and Christine D. Wilson</i>	L73
SUBSONIC MECHANICAL ALIGNMENT OF IRREGULAR GRAINS \textcircled{E} <i>A. Lazarian and Thiem Hoang</i>	L77
EXPANDED VERY LARGE ARRAY OBSERVATIONS OF THE 6035 MHz OH MASERS IN ON 1 <i>Vincent L. Fish</i>	L81
ON THE MASS OF THE NEUTRON STAR IN V395 CARINAE/2S 0921–630 \textcircled{E} <i>D. Steeghs and P. G. Jonker</i>	L85
HIP 56948: A SOLAR TWIN WITH A LOW LITHIUM ABUNDANCE <i>Jorge Meléndez and Iván Ramírez</i>	L89
A MECHANISM FOR ORBITAL PERIOD MODULATION AND IRREGULAR ORBITAL PERIOD VARIATIONS IN CLOSE BINARIES <i>Jinzhao Yuan and Shengbang Qian</i>	L93
DISCOVERY OF AN M9.5 CANDIDATE BROWN DWARF IN THE TW HYDRAE ASSOCIATION: DENIS J124514.1–442907 \textcircled{E} <i>Dagny L. Looper, Adam J. Burgasser, J. Davy Kirkpatrick, and Brandon J. Swift</i>	L97
DO WE NEED TO KNOW THE TEMPERATURE IN PRESTELLAR CORES? <i>Ya. Pavlyuchenkov, Th. Henning, and D. Wiebe</i>	L101
STRINGENT CRITERIA FOR STABLE AND UNSTABLE PLANETARY ORBITS IN STELLAR BINARY SYSTEMS <i>M. Cuntz, J. Eberle, and Z. E. Musielak</i>	L105
A NONLINEAR ENERGY BALANCE MODEL OF PARTICLE ACCELERATION BY COLLISIONLESS PARALLEL SHOCK WAVES <i>V. L. Galinsky and V. I. Shevchenko</i>	L109
IMPROVED REST FREQUENCIES OF HCO^+ AT 1 THz <i>F. Tinti, L. Bizzocchi, C. Degli Esposti, and L. Dore</i>	L113
INSTRUCTIONS TO AUTHORS OF LETTERS, AND ADDITIONAL USEFUL INFORMATION	<i>Inside Back Cover</i>
INSTRUCTIONS FOR ELECTRONIC MANUSCRIPT SUBMISSION	<i>Back Cover</i>

